From: "Andrew M Streit" <andrew.streit@argandenergy.com>

To: <coombsn@scsenate.org> **Date:** 11/2/2008 6:45 PM

Subject: Questions on future energy policies

Attachments: Questions for Public comment SC PSC.docx

I am submitting some comments on the questions put forth by the committee. I feel strongly South Carolina is at a pivotal juncture and can guarantee future job growth if it invests in renewable energy.

Thanks

Andrew M. Streit

Business Development South Carolina

http://www.argandenergy.com/> 1 (27).jpg

740 South Edisto Ave

Columbia SC 29205

tel. 803 665 6688

We believe that part of the answer lies in pricing energy on the basis of its full costs to society. One reason we use energy so lavishly today is that the price of energy does not include all of the social costs of producing it. The costs incurred in protecting the environment and the health and safety of workers, for example, are part of the real costs of producing energy-but they are not now all included in the price of the product.

-- Richard Nixon 37th President of the United States

1. What action do you anticipate from the U.S. Congress as to climate change legislation? What impact may this have on South Carolina?

I expect the Congress to create a cap and trade market on CO2 emissions and a secondary market on all energy produced pollution that would incentivize clean energy production. This would severely impact SC which imports coal from Kentucky to burn in Coal based plants.

Without a Renewable Portfolio Standard the Investor owned utilities cannot currently invest in renewable energy because pollution is not factored into the profit equation. South Carolina must pass a robust, incentivized Renewable Portfolio Standard.

2. Does South Carolina have governmental resources available to study, plan, or act upon current or future energy policies? Are these resources sufficient? Are these resources appropriately empowered to act? Is there any overlapping of roles?

This question is directed to the public to determine if Public agencies have the skills and capabilities to analyze Energy policy? When does social and environmental cost outweigh immediate profit or affordability cost? Would we all like to be able to eat any and all fish in South Carolina River's? What are the mandates of each office related to future energy policies? These offices include but I don't think they are limited to South Carolina Energy Office, DHEC, The office of Regulatory Staff, and the Public service commission. I think an Energy director who can incorporate all the mandates of these many agencies would be beneficial. Someone who could take to task each office for their responsibilities to ensure that decisions are being made to make South Carolina, competitive, innovative and safe for all its people. This energy director could be appointed by the Governor or the State but should be elected or accountable and should not be without term limits to encourage good performance.

3. How do we use electricity in South Carolina? How is our use different from other states, with respect to amount of use and type of use? What factors drive this usage? What can we do to better use our energy resources? What demographic or other factors prohibit or inhibit our ability to be more energy efficient?

We consume electricity at a higher rate than the national average. Without HVAC unit's life in the South would be difficult. With the advent of mass computing electrical consumption is slated to rise, SCE&G predicts 16% growth over ten years, with large scale adoption of hybrid electric cars this may be accurate or low. Enacting incentivized building code to REWARD energy conservation would dramatically reduce our consumption. South Carolina has some of the best sun in the country outside of the desert southwest. The utilities are designed to sell energy not conserve it, this is

their function. It is the legislators and Commissions function to protect the best interest of the rate payers. A Renewable Portfolio Standard would free the Utilities to invest in clean energy production and create more in state jobs and invest in a smart grid which would reduce overall consumption and manage peak loads more effectively.

4. What types of renewable sources of energy are available in South Carolina? What is the expected cost to produce and transmit electricity from those resources?

Off coast wind power is being developed in Europe cost effectively, Germany has rolled out more solar than the USA, yet they have the solar irradiance of Alaska, South Carolina has the potential to lead the East coast in Solar powered production. Please don't ever tell me Europeans are better at something that the USA. I lived in Europe, and the only things Europeans are better at are soccer, pastries and vacationing. A New Mexico company is developing Algae based Bio-fuels, if we invested in this technology we could lead the country in sustainable, cost effective, job creating algae factories and distillation facilities. All we need is research, leadership and wise investment.

- 5. What types of non-native renewable resources are available to South Carolina? What is the expected cost to transmit electricity from those resources to South Carolina?
- 6. What programs that promote energy efficiency exist in our state? Are these programs affordable to all South Carolinians? Should they be affordable to all South Carolinians? Are energy efficiency measures a cost-effective alternative to the construction and operation of generation facilities? How should energy efficiency incentives be designed?

The utility based programs are underfunded and counter intuitive to their business plans. Government's job is to promote innovation and regulate free market activities to protect the consumer from unabated greed. Incentivized code changes for building and modifications to tax code that reward utilities for conservation are critical to promoting the right long term decisions by all. If a nuclear plants pre-construction costs are \$10 billion dollars you can expect the plant to come in at \$12-15 billion dollars. The operating costs over a 40 year span and the uncertainties of storing waste make conservation an important consideration. Nuclear plants may well need to be built but a true cost analysis is important. Next generation Solar won't be developed without an RPS and South Carolina won't benefit from green jobs without an RPS.

7. The heavy use of concrete and steel to construct coal and nuclear generating facilities in China, India, and other developing nations and the importation of fuel needed to create energy from those facilities has increased the price of these raw materials and commodities beyond most projections. Is this level of growth sustainable? Will prices continue to be driven by this global demand? How will South Carolina be affected by this global demand?

World population growth is the underlying reason to become energy secure. Most people think of the Middle East as a reason for energy independence. With the rise of

India (1 billion) and China (1.3 billion) future generations face the prospect of fighting for resources. Food, energy and shelter are the three major resources that will consume world attention in the next 100 years. We can follow behind and reel from the consequences or we can lead. I want South Carolina to quietly take the lead and take a position of strength and independence securing the well-being of all South Carolinians.

8. How has the current economic situation affected the projections for energy use?

Rust belt migration to the Carolina's will continue until either Detroit or the government tackles the issue that US domestic car makers react and are not proactive in consumer decision making. We can't all work for Toyota and LG we have to find a way to make us more competitive in the 21^{st} century economy. New energy investment could provide the backbone to a sustained period of job growth and infrastructural investment that propels South Carolina as the major Southeastern economy to harness 21^{st} century capabilities.